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| <b>Office Action Summary</b> | <b>Application No.</b><br>10/643,645 | <b>Applicant(s)</b><br>KRALLMAN ET AL. |  |
|                              | <b>Examiner</b><br>Dave Robertson    | <b>Art Unit</b><br>2121                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-146 is/are pending in the application.
- 4a) Of the above claim(s) 19-37, 55-72, 91-109, and 128-146 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-18, 38-54, 73-90 and 110-127 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |



### **DETAILED ACTION**

1. This is a Non-final office action after the filing of a Request for Continuation (RCE) on 9/10/2009. Claims 1 and 3-146 are pending; claims 19-37, 55-72, 91-109, and 128-146 are currently withdrawn by election, leaving claims 1, 3-18, 38-54, 73-90, 110-127 for examination herein.

### ***Continued Prosecution Application***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/10/2009 has been entered.

### ***Response to Amendment***

3. Applicant amends claim 1, 38, 73, and 110 (all independent claims), to further recite aspects of the invention directed to determining, *dynamically during the survey*, a stored survey question for inclusion in the survey based on an inclusion value which is a *single value* based on two of three of: *conditional branching logic, response variable, and a global inclusion value multiplier*.

***Response to Arguments***

4. Applicant's arguments with respect to claims rejected over Desai et al (US Pat. 6,618,746) have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant does not traverse Examiner's assertion of facts by official notice in the prior office action (OA of 3/10/09, page 7, "old and well known to provide surveys by...kiosks, point-of-sale device, voice response device, etc.) Because Applicant has not specifically pointed out any errors in the Examiner's taking of Official Notice, the officially noticed facts are deemed admitted prior art. See MPEP § 2114.03 (C).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-18, 38-54, 73-90, 110-127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahlert (US Pat. No. 7,398,223) in view of Altman et al (US Pat. No. 5,572,421) and Wang et al. (US Appl. Pub. 2002/0065705).

Claim 1

Kahlert teaches **a method for selecting survey questions for inclusion in a survey generated on a computer** (columns 18-22 "Generating the Screening

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Questions for Respondents.” Selecting and presenting questions to screen participants in preparation for selecting an appropriate survey for the participant (the main objective of Kahlert) is *itself* a survey), **the method comprising:**

**storing, in first computing device, survey questions and survey response information provided by survey participants** (see Figures 1 and 2A);

**determining, dynamically during the survey, in at least one of the first computing device and a second computing device, a[n] inclusion value for each survey question** (column 18, lines 31-45: target criteria; column 18, line 65: “questions *dynamically* generated”; column 20, lines 14-49: selection of questions by a “variety of factors...to determine which questions are to be included or excluded from the set of screening questions.” Determining, for each screening question whether or not to present the question to the participant is, broadly, *determining an inclusion value*);

**selecting, in at least one of the first computing device and the second computing device, a stored survey question for inclusion in the survey based on the inclusion value of each survey question** (column 20, lines 32-55: i.e. which screening questions to include or exclude from the participant survey based on the “variety of factors”);

**and providing, via at least one of the first computing device and the second computing device, the selected survey question to a survey participant** (column 21, lines 33-50).

Kahlert teaches, as above, a “variety of factors” that determine whether or not a question is included or excluded from the set of screening questions presented to a

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survey participant (column 20, lines 15-55), including **conditional branching logic** (column 19, lines 10-12; column 21, lines 40-51) based on the “condition” of participant gender and prior response to questions; however, Kahlert does not expressly teach a **single inclusion value**, the single inclusion value...**based on at least two of** **associated conditional branching logic, response variance for each stored survey question, and a global inclusion value multiplier.**

Kahlert does not disclose details of implementation of how questions in the database are programmatically selected to be included or excluded from the screening survey. Rather, the present invention and Kahlert each disclose an “inclusion value” defined functionally by the operation of the concept to decide on the inclusion or exclusion of questions based on some factors. However, while Kahlert does not expressly disclose arriving at a *single* inclusion value, leaving the details of programming to one of ordinary skill in the art would find in the prior art methods to make such selections based on a *single* value where that the single value determines whether or not to include a question the a survey.

Altman et al., for example, in the art of survey question selection programming, explicitly teaches implementation details of a survey system (for medical questionnaires) where each question in the question database is assigned a code (a computer a value of “0” “1” or “2”) which determines whether or not a question is to be included in the survey for a participant (see column 14, lines 5-9: for example, the <Assoc Flag> is a “value” that when set to “2” indicates that a question that should be asked of females only).

In view of Altman's implementation of a code (a "value") functioning operatively as a *single inclusion value* for each question, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement Kahlert's question selection process by assigning a value to each survey question and selecting the question based on the value, thereby providing a means for programmatically determining whether or not to present a question to the survey participant.

As for *response variance*, Wang et al. teaches selecting questions for a survey based on the variance of responses to each question in a set of stored survey questions (see Abstract; ¶[0021-0022]). If Wang's "selection ratio" (i.e. response variance) among chosen responses to a question exceeds a predetermined threshold the question is considered a "definite option" and therefore determined that the question would not add additional value to the information collected by the survey (see Abstract and [0023-0024]: teaching also using conditional logic based on *gender*). That is, Wang teaches basing a **single inclusion value** on a **response variance** and **conditional branching logic** to determine whether to include or exclude each question from the survey.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further include among the "variety of factors" for question selection in Kahlert, an inclusion value based on conditional logic and response variance of Wang, implemented using the programmatic details of Altman whereby a single value (a code) associated with each survey question is used to determine whether or not to include or exclude a question in a survey. This would have provided the advantage of a known

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programmatic solution to the teachings of Kahlert using the specific factors (response variance and conditional logic) taught in Wang, thereby improving the both the coding efficiency and information value of Kahlert's screening survey.

Claim 3

Kahlert teaches **wherein at least one of the first and second computing device is a personal computing device** (Figure 2A: a Network user client is a *personal computing device*).

Claims 4-6

Kahlert does not expressly teach **the method of claim 1, wherein at least one of the first and the second computing device is an exit kiosk; a point-of-sale terminal; an interactive voice response system.**

Official Notice is taken that it is old and well known to provide surveys by various computing devices contained or configured as *kiosks* and *point-of-sale terminals*, or by telephone using interactive voice response. It would have been obvious to one of ordinary skill in the art at the time of invention to provide surveys by these various computing devices as this would have provided access to survey participants in a variety of venues by various means (i.e. malls, stores, by telephone), thereby increasing participation in the survey by providing the participant convenient access to the survey device.



Claim 7

Kahlert teaches **wherein the survey questions are stored in a location local to at least one of the first and the second computing device** (Figure 2A: survey questions stored on the Survey Conductor computer (254)).

Claim 8

Kahlert teaches **wherein the survey questions are stored in a location remote from at least one of the first and the second computing device** (Figure 2A: Survey Conductor computer is remote (via Internet) to the Network User Client(s)).

Claim 9

Kahlert teaches **wherein the inclusion value of each stored survey question is based on associated conditional branching logic** (column 20, lines 15-38: inclusion value of each question includes condition of ones gender).

Claims 10 and 11

Kahlert does not expressly teach **wherein the inclusion value of each stored survey question is based on the response variance for each stored survey question**. However, as above for claim 1, Kahlert in view of Altman and Wang teaches or suggests an **inclusion value based on response variance for each stored survey question** (see claim 1 rejection above).

Claim 12

Kahlert does not expressly teach **wherein the inclusion value of each stored survey question is based on a global inclusion value multiplier**.

Kahlert teaches means for determining the set of questions to be presented based on the duration of the survey, the number of completions of a set of question in a survey, and the number of completions of a survey over a period of time (column 20, line 56 to column 21, line 32), all factors which are *global* (i.e. not pertaining to any particular question but rather to a set of questions in a survey. As with the disclosure of the present invention, Kahlert does not provide implementation details of how to programmatically effect the selection of questions based on these global factors, however, Kahlert teaches that "active surveys that possess fewer completions may be assigned a higher priority".

It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize that programmatically, Kahlert's "priority" applied globally to the questions of a survey for deciding which questions to present would perform an equivalent function to the "inclusion value multiplier" of the present invention; that is, provide a global value applied to each question to determine which questions to include or exclude from a survey. This would have provided the advantages of a programmatic solution to the teachings of Kahlert, thereby improving the coding efficiency and information value of Kahlert's screening survey.

Claim 13 recites **wherein the inclusion value of each stored survey question is based on a combination of conditional branching logic, response variance, and a global inclusion value multiplier**, which is similarly rejected for reasons given above in claims 1 and 12 referring to combinations of logic, variance, and a global multiplier used to determine whether a question is included or excluded.

Claim 14

Kahlert teaches **wherein the inclusion value of each stored survey question is determined in substantially real-time as survey response information is stored** (column 23, lines 6-9: questions are generated "on the fly", i.e. dynamically).

Claims 15 and 16

Kahlert does not expressly teach **wherein the survey question is selected because the inclusion value for the selected survey question is higher than the inclusion value of other stored survey questions; or higher than a threshold**. However, by extension of the rationale for claim 1 in view of the implementation details of Altman (column 14, lines 1-9) and Wang ([0023]), Kahlert teaches or suggests **...selection because the inclusion value...is higher than [that] of other stored questions** (Altman: "2" is an inclusion value higher than "1" or "2" for selection of questions for females only), and **higher than a designated threshold inclusion value** (Wang: response variance threshold).

Claim 17

Kahlert does not expressly teach **designating a common initial inclusion value for all stored survey questions**. However, by extension of the rationale for claim 1 in view of the implementation details of Altman (column 14, lines 1-9), Kahlert teaches or suggests **designating a common initial inclusion value for all stored survey questions** (Altman: default value of "0" for all questions).

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Claim 18

Kahlert teaches means for determining the set of questions to be presented based on **the duration of the survey** (column 20, line 56 to column 21, line 32).

Claims 38-54 recite computer implemented systems for performing the methods of claims 1 and 3-18, and are similarly rejected for reasons given above for the respective claim and claim elements, and that Kahlert teaches a computer-implemented system.

Claims 73-90 recite computer-implemented system means for performing the methods of claims 1 and 3-18, and are similarly rejected for reasons given above for the respective claim and claim elements, and , and that Kahlert teaches means for a computer-implemented system.

Claims 110-127 recite computer program product for performing the methods of claims 1 and 3-18, and are similarly rejected for reasons given above for the respective claim and claim elements, and that Kahlert teaches a system implemented as computer program product.

***Conclusion***

8. The prior art made of record and listed on the attached PTO Form 892 but not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Robertson whose telephone number is (571)272-8220. The examiner can normally be reached on 8 am to 6 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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